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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,305	12/11/2000	Alexis Campailla	154751.1/40062.83US01	3884
23552	7590	06/03/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			MIRZA, ADNAN M	
			ART UNIT	PAPER NUMBER
			2145	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/734,305

Applicant(s)

CAMPAILLA, ALEXIS

Examiner

Adnan M. Mirza

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/30/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatt et al (U.S. 6,405,191) and Gharachorloo et al (U.S. 6,738,868).

As per claims 1,7,13 Bhatt disclosed a method for filtering one or more messages for transmission or subscriber computing system according to an individual information request criteria, the method comprising: constructing a binary decision diagram implication graph for each individual information request criteria specified for each subscriber; identifying logical implications from one or more nodes in a binary decision diagram from a first information request criteria to one or more corresponding binary decision diagrams within a second information request criteria (col. 1, lines 53-64); receiving one or more messages to be filtered; evaluating a first information request criteria based upon information within the received messages; evaluating one or more information request criteria based upon information within the received messages using the identified logical implications between one or more binary decision

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diagrams within the information request criteria being evaluated and one or more binary decision diagrams previously evaluated (col. 4, lines 31-57);

However Bhatt did not disclose in detail transmitting the received message to the subscriber computing system corresponding to an information request criteria evaluated to be satisfied by information combined within the received message.

In the same field of endeavor Gharachorloo disclosed in detail this is the case when a transaction needs to send two or more messages to other nodes in the system. The scheduler is able to determine whether the current Even (or Odd) transaction should be scheduled to execute again during the next Even (or Odd) clock cycle by inspecting the state, counters and condition codes in the TSRF of the currently executing transaction to determine if they satisfy predefined criteria for continuing execution of the current transaction for an additional execution cycle (col. 13, lines 64-67 & col. 14, lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have incorporated when a transaction needs to send two or more messages to other nodes in the system. The scheduler is able to determine whether the current Even (or Odd) transaction should be scheduled to execute again during the next Even (or Odd) clock cycle by inspecting the state, counters and condition codes in the TSRF of the currently executing transaction to determine if they satisfy predefined criteria for continuing execution of the current

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transaction for an additional execution cycle in the method of Bhatt to reduce latency of sending messages across the network by reducing congestion inside the network.

3. As per claims 2,8,14 Bhatt- Gharachorloo disclosed wherein the binary decision diagrams include an expression of an information request criteria in an if-then-else normal form (Bhatt, col. 5, lines 15-24).

4. As per claims 3,9,15 Bhatt- Gharachorloo disclosed wherein the constructing step further comprises recursively visiting the high and low successors for each node in the binary decision diagrams; while visiting each node, determine the precondition $\text{pre}(X')$ for each successor and compute the target $t(X')$ for all visited nodes and apply permissible implications; and iterate the processing for all implications (Bhatt, col. 14, lines 21-35).

5. As per claims 4,10,16 Bhatt- Gharachorloo disclosed wherein permissible implications for a node M with successor node N include: If node N is equal to the high successor $\text{high}(M)$, and If $p(M)$ implies $p(N)$, then remove N and set the $\text{high}(M)$ equal to $\text{high}(N)$; and if $p(M)$ implies $\neg P(N)$, then remove N and set $\text{high}(M)$ equal to $\text{low}(N)$ (Gharachorloo, col. 14, lines 33-46).

6. As per claims 5,11,17 Bhatt- Gharachorloo disclosed wherein permissible implications for a node M with successor node N include: If node N is equal to the low successor $\text{low}(M)$, and

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if ! $p(M)$ implies $p(N)$, then remove N and set the $low(M)$ equal to $high(N)$; and if ! $p(M)$ implies ! $p(N)$, then remove N and set $low(M)$ equal to $low(N)$ (Gharachorloo, col. 25, lines 41-67).

7. As per claims 6,12,18 Bhatt- Gharachorloo disclosed wherein the evaluating steps further comprises determining if a current node is a leaf node in the binary decision program; if the current node is a leaf node, marking the information request criteria as being decided and returning the value of the current node; if the current node is not a leaf node (Bhatt, col. 14, lines 6-21), determining a value of the expression for the node $p(X)$; if the value of the expression of the node is true setting $X' = high(x)$ otherwise $X' = low(X)$; inserting X' into the rank; and visiting the targets of node X' to compare the current node with the target node; if the target node is lower then the current node according to a predicate order, update the current node (Bhatt, col. 6, lines 29-41).

Conclusion

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

9. The examiner can normally be reached on Monday to Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin Wallace can be reached on (571)-272-6159. The fax for this group is (703)-746-7239.

10. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-746-7239 (For Status Inquiries, Informal or Draft Communications, please label "PROPOSED" or "DRAFT");

(703)-746-7239 (For Official Communications Intended for entry, please mark "EXPEDITED PROCEDURE"),

(703)-746-7238 (For After Final Communications).

11. Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

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Any response to a final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks Washington, D.C.20231

Or faxed to:

Hand-delivered responses should be brought to 4th Floor Receptionist, Crystal Park II,
2021 Crystal Drive, Arlington, VA 22202.

AM

Adnan Mirza

Examiner

V. Martin Wallace
VALENCIA MARTIN-WALLACE
SUPERVISORY PATENT EXAMINER